

536, 776

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
24 June 2004 (24.06.2004)

PCT

(10) International Publication Number  
**WO 2004/052703 A1**

(51) International Patent Classification<sup>7</sup>: **B60S 3/06**

(21) International Application Number:  
PCT/IT2003/000053

(22) International Filing Date: 4 February 2003 (04.02.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: **6 June 05**  
MI2002A002588 6 December 2002 (06.12.2002) IT

(71) Applicant (for all designated States except US): **FAVA-GROSSA EDOARDO S.R.L.** [IT/IT]; Via Lepanto, 51, I-26040 Roncadello Di Casalmaggiore (IT).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **FAVAGROSSA, Francesco** [IT/IT]; Via Teatro, 12, I-46018 Sabbioneta (IT).

(74) Agent: **CICOGNA, Franco**; Ufficio Internazionale Brevetti Dott. Prof. Franco Cicogna, Via Visconti di Modrone, 14/A, I-20122 Milano (IT).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

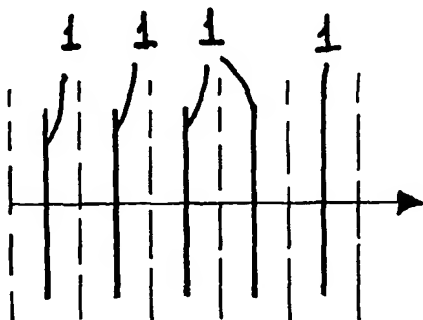
(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

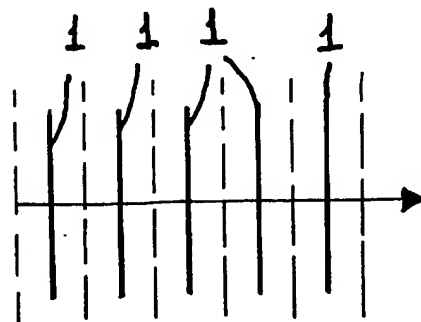
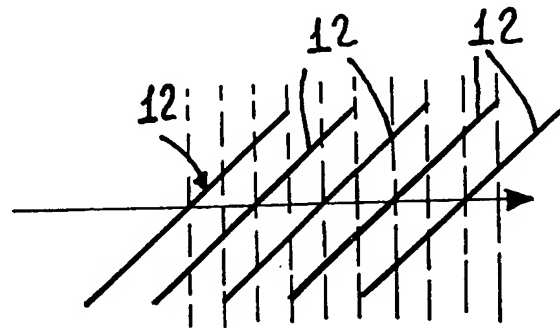
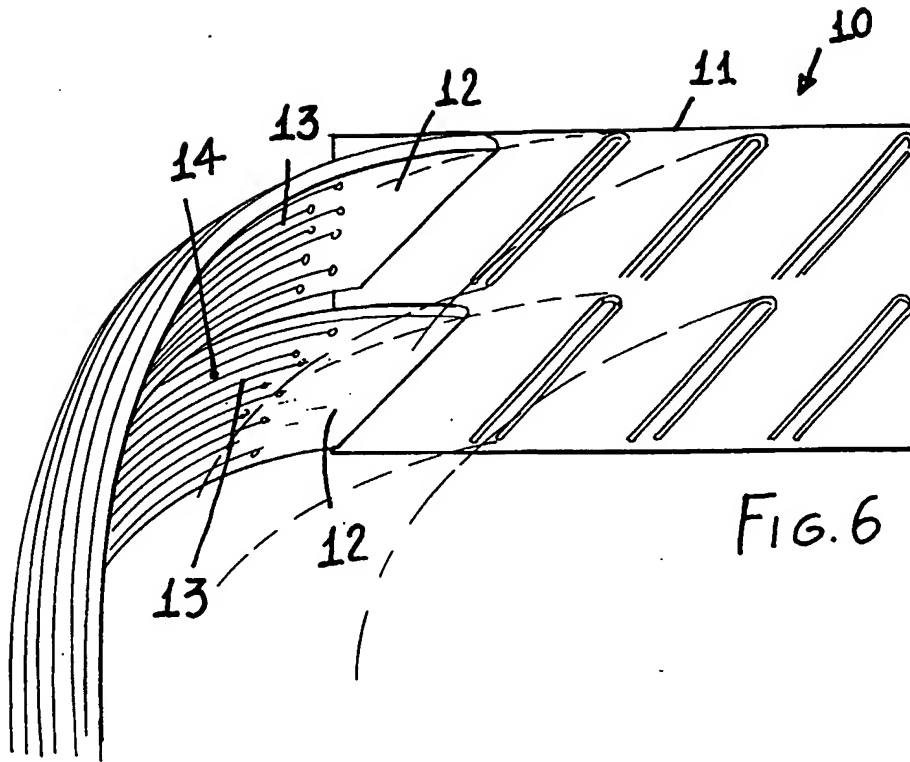
(54) Title: WASHING BRUSH FOR AUTOMATIC MOTOR VEHICLE WASHING SYSTEMS



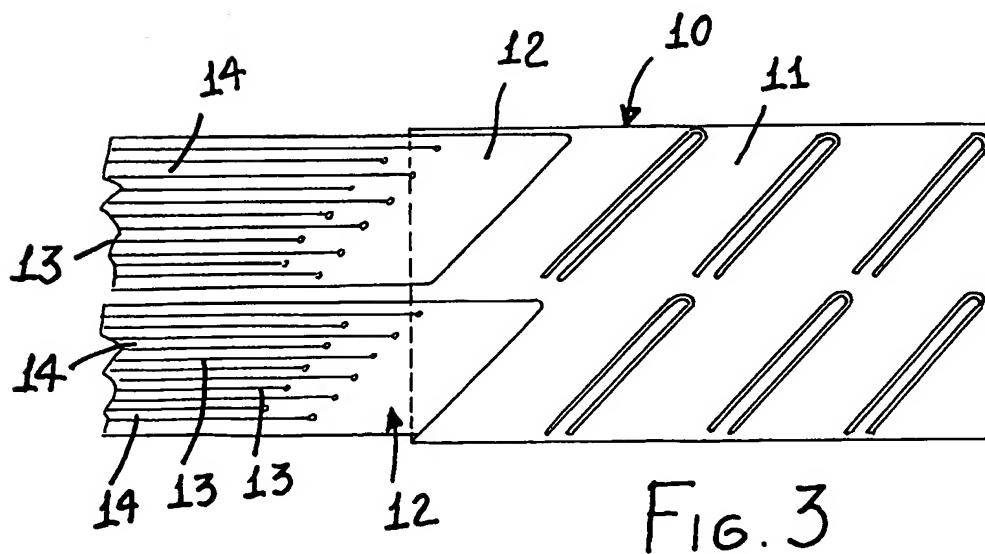
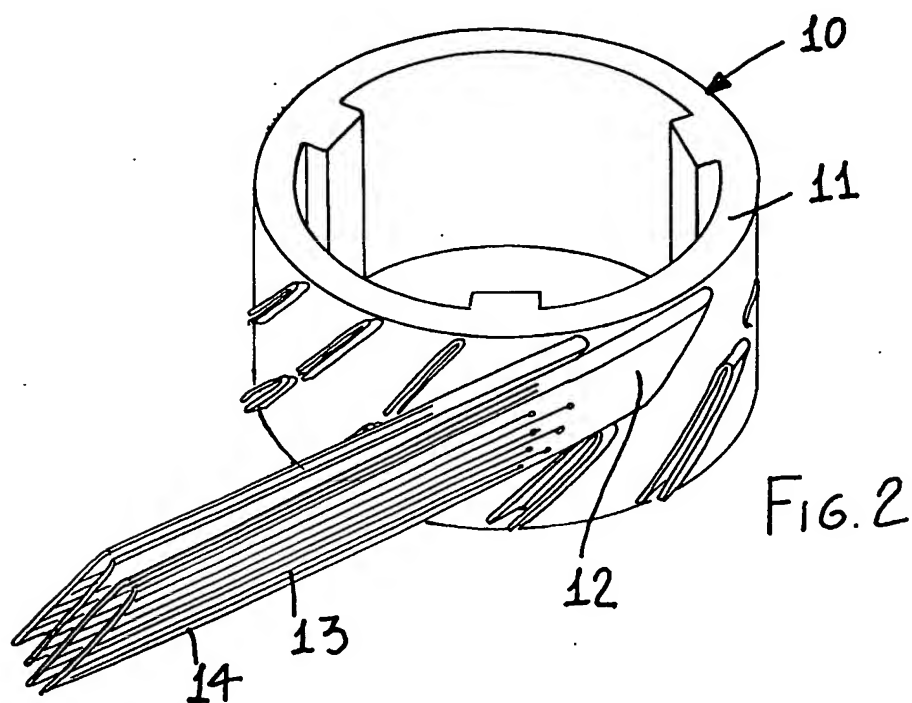
(57) Abstract: The present invention relates to a washing brush for automatic motor vehicle washing systems, comprising a cylindric body on the side outer surface thereof are provided a plurality of bands defining the cleaning elements of the brush. The main feature of the invention is that the band or strip elements extend on the side surface of the cylindric body along direction which are inclined with respect to the axial direction.

WO 2004/052703 A1

1/4



2/4



3/4

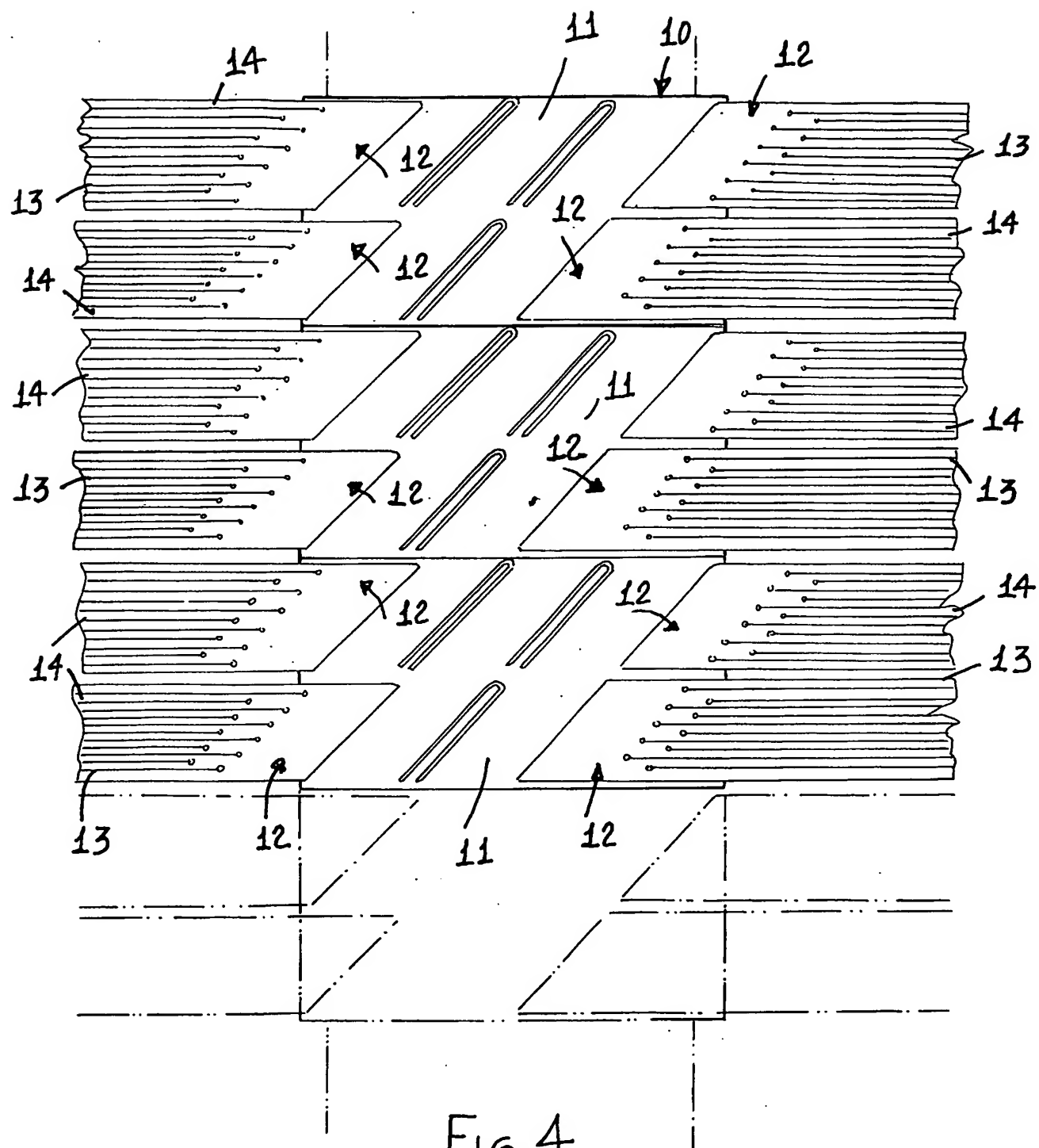


FIG. 4

4/4

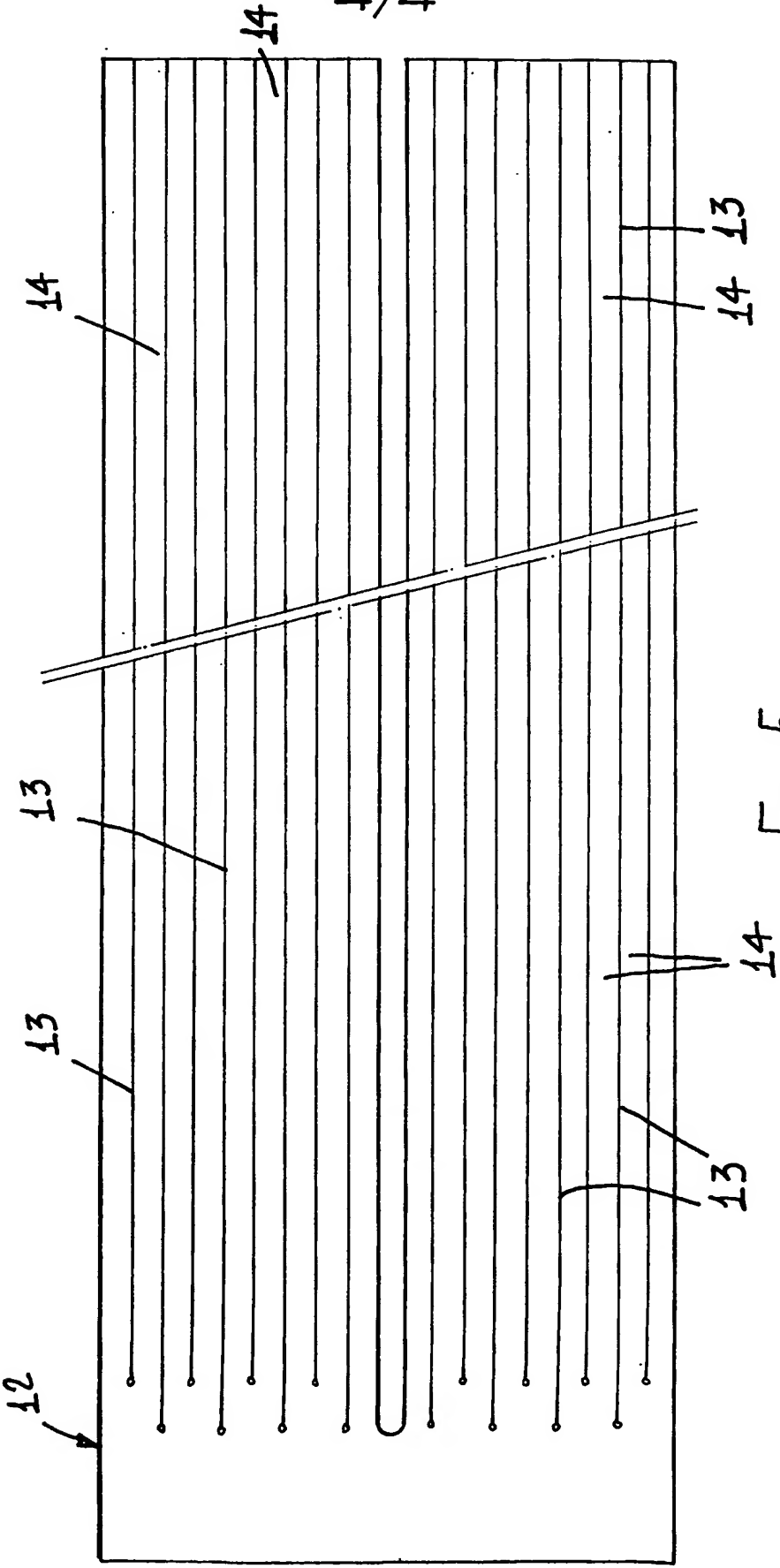


FIG. 5

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IT 03/00053

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 B60S3/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 B60S

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 139 641 A (PARSEGHIAN GERARD A ET AL) 7 July 1964 (1964-07-07)	1-5,7
Y	column 4, line 42 - column 5, line 23; figures 5,13	6
Y	DE 201 14 359 U (WASH TEC HOLDING GMBH) 24 January 2002 (2002-01-24) abstract; figures	6
A	US 3 241 172 A (TILGNER RALPH F) 22 March 1966 (1966-03-22) the whole document	1-7
A	US 3 439 373 A (CLARK GAYLORD J) 22 April 1969 (1969-04-22) the whole document	1-7
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the International search

18 June 2003

Date of mailing of the international search report

26/06/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Gavaza, B.

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IT 03/00053

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 0092, no. 86 (M-429), 13 November 1985 (1985-11-13) & JP 60 128050 A (WAI KEI GIKEN:KK), 8 July 1985 (1985-07-08) abstract; figures -----	1-7
A	DE 199 07 441 A (VORBACH HARALD) 31 August 2000 (2000-08-31) abstract; figures -----	1-7

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IT 03/00053

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 3139641	A	07-07-1964	NONE	
DE 20114359	U	24-01-2002	DE 20114359 U1 WO 03018375 A1	24-01-2002 06-03-2003
US 3241172	A	22-03-1966	NONE	
US 3439373	A	22-04-1969	NONE	
JP 60128050	A	08-07-1985	JP 1052222 B JP 1566468 C	08-11-1989 25-06-1990
DE 19907441	A	31-08-2000	DE 19907441 A1	31-08-2000